

# A L Y T E L

treatyse of Astronomy, de-  
claryng the leape yere, and what is the  
cause therof, and howe to knowe saynte Ma-  
rthies day for euer, with the maruelous motion  
of the sonne, both in his owne propre circle, and  
by the mouyng that he hath of the tenth, ninth  
and eight spere, withal the diuersities of days,  
houres, and mynutes, by the sayde mouynges  
and also the dyuersities that may come by dy-  
uers and sundry inhabitations vpon the earth.

whereby December in the space of tyme, shal-  
be remoued and be the hyghest monethe in  
sommer, and June the lowest in wynter,  
also where the longest day in  
the yere shalbe halfe the yere  
longe. And where it is Sa-  
terday in one place, it shal  
be Sundaye in an other  
place, al at one tyme.

Made and compo-  
sed by Anthony  
Askham Phi-  
lytion.

In the yere of our Lorde God. M. D.  
L. III. Also there is a table added to  
the ende of the booke, where-  
by maye be knowne al the  
partytulers therein  
conternyed,



*Lynoch*

*1574*

**HENRICI PENDILTO**  
in Oxoniensis ad beneuolum  
lectorem.

**A**nglia iam tandem, stupidis orbata magistris:  
Floret in aeterni cognitione Dei.  
Queq; diu latuit, spissis, heu, merſa tenebris:  
Lumine iam fulget, pulchra ſoſhia nouo.  
Nec contenta ſcholis, regnum prorumpit in omne  
Et pariter inuenes inſtruit, atq; ſenes.  
Hoc tibi reſtatur preſens. (mibi crede) libellus:  
Exuperans magnos utilitate libros.  
Que miſere torſit multos, nunc quaſto cunctis  
Illustrata patet, niſq; latere ſcias.  
Aſcamus hic quantum ſtudit, quantumq; laboris  
Suſtulit: iſta legens, lector amice uidet  
Redde Deo laudes, quiſquis legiſti, ſta perennes:  
Et ſemper ſtudiis diſce fauere bonis.



¶ To the ryght woꝛthyfull and his  
singuler good mayster Sir John Cheke  
knyght, and one of the scole maysters  
to the kynges maiestie, Anthony  
Askham phisition wysheth good  
helth and long lyfe in pꝛoꝛ  
spere & woꝛthype.

**B**ecause that now of late, right  
woꝛthyfull syꝛ, at my laste  
cōpyng vp to London a lytel  
before saint Mathias daye,  
byenge at diuerse and sondꝛy tymes in  
the cōpany of many ryght woꝛthyfull  
and honest men by whose ientyl kynd &  
louynge encertaynēt I haue bene the  
moze bolde to entre into certayne deuī  
ses and cōmunicacion wīch them, and  
chiefly amongst al otheꝛ talkyng of the  
noble arte Mathematicall and sciens of  
Astronomy, makyng an answer after  
my poꝛe knowlege, accoꝛdige to al cheir  
demaundes, and specially in this poynt,

### The Pytyle.

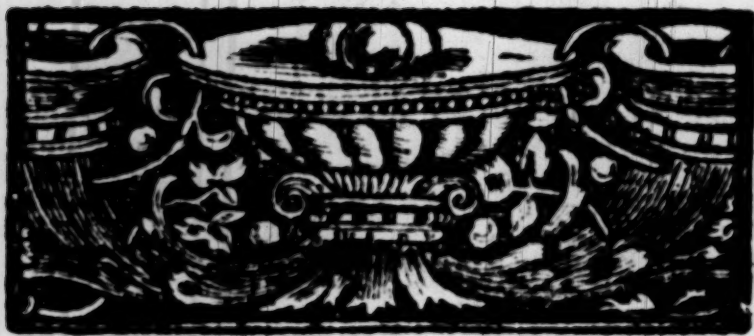
as concernyng the tyme and daye of the  
Leape yere, & besydes that I haue per-  
ceyued nowe presently some alteracion  
and diuision to be amongst the ministers  
and curates of the church for the true  
knowlege of sainte Mathias daye, nat  
withstandyng the declaracion of al our  
kalenders & Almanackes, wherfore this  
doute & partly diuision comynge dayly  
before myne eyes hath called to remeni-  
braunce the great diuisions & controuer-  
sies, the whiche hath ben before tyme  
amonge the Astronomers for the true  
knowlege of the length of the yere, the  
length of the day, the diuision of days,  
houres, minutes, secondes, thyrdes. &c.  
bothe of the Hebrews, Grekes, & La-  
tyns, and also of the .iii. kalenders made  
therfore bothe by Rhomulus, Pompei-  
lius & Iulius Caesar, with the kalenders  
of Iulyan & Scoflere, and also the opi-  
nions of the Arabians therin: of al the  
diuersities of yeres, monthes, days, hou-  
res,

res & leape yeres. And faderinoze remem  
brynge the great diuision that was be  
tweene the Romaines, Lacing & Grekes  
the space of .l. yeres for the true knowe  
lege of Easter dawe. In so muche that at  
this day the Romaines are yet separated  
from the Grekes in that diuision, by the  
whiche occasion Scofflere dyde make  
the great Romain kalender at Tubyn  
ga. And also the sayd diuision beyng  
here in Englande at the same present  
tyme betwix the byshop Colmanus,  
& Hylda & abbesse of the one partie, and  
Egilbert the byshop of wessaxons and  
wylfrede abbot of Rypon of the other  
partie, for the which was made a coun  
saile at wylbyrby abbey. Hylda beyng  
there abbesse, wherof rose muche cōten  
cion in this realme of Englande & al for  
lacke of & true knowlege in the sciens of  
Astronomy, wherfore cōsydering these  
premisses yet partely succeeding by cer  
taine bzaunches of diuision, as cou  
ching



**The Pyfle.**

thyng the leape yere I haue enterprised  
to write this lytel treatise, and to gyue  
and dedicate the same vnto your may-  
sterthyp, besechyng your maysterthyp  
to accepte and take it for a signe and  
token of my good wyll, because my  
power is no better, and I shall  
pray dayly for youre may-  
sterthyp and for the con-  
tinuans of your helthe  
and dayly pros-  
perite.



The declara. of the Leape yere. Fo.iii.  
**I**n so muche that the Leape yere and  
causes therof, and also the comon yeres,  
dayes, houres, and minutes, with all the di  
uersities, cometh and are made al only  
by the viage, cours, and mouyng of  
the son. I wyl first declare the Cir  
cle of the sō with his viage, cours  
and mouyng therin, as here af  
ter foloweth.

**T**he circle that the sonne mo  
ueth vnder, is called the Zo  
diake, whose situacion reallē  
is in the cyghe spere & there  
he is figured with diuerse  
and sundry kyndes of beastes paynted &  
set fourthe with many goodly sterres, &  
also in the tenth and nyne spere he is  
described with lynes and characters cor  
respondyng the sayd sterred heauen by  
ymagination, bothe in laticude and lon  
gitude, and also as cōcernyng the pro  
pre bredth of this Zodiake circle, know  
that it conteyneth. xvi. degrees, as may  
be

The declaration of  
be evidently proued by the latitude of  
Venus, the whiche is . viii. degrees,  
and as touchynge the bredth and lati-  
tude of the signes, ymages, and figures  
therin conceyued. Knowe that all the  
wozrde is ouersprede with them, so that  
there is nothynge vpon the earth, but þ  
it is vnder some signe, figure, or yma-  
ge of the sayd Zodiacke, wherby bothe  
man and beaste, fysh and foule, herbe  
and stone, receyueth influence, proper-  
te and inclination for the commodite of  
man so ordeyned of God. Also the  
forme and fashion of the Zodiacke is cro-  
ked and nat streyght lyke other circles  
in respecte to the Poles of the wozrde,  
declynynge bothe South & North as ye  
myght ymagine hys standynge to be from  
the Southeast to the Northwest aboue  
the earth, and the contrary benethe the  
erth, and yet he is a streyght circle and  
moueth directly vpon his owne Poles, &  
in the mydes therof is the propre biage  
of the



the Leape yere.

Fol. iiii.

of the sonne in a lyne called the eclyp-  
tyke lyne, & by the situacion of this Zo-  
diake the sonne is carped bothe Nozthe  
and South, wherby generation and cor-  
ruption winter & somer is made thzough  
all the hole worlde at sondry tymes &  
places ones in a yere, as well beneth the  
earth as aboue. And for this purpose the  
diuine power hath so ordeyned this cir-  
cle to be croked & go a shize in respecte  
to oher, that therby al the earthe maye  
receyue the influence of the sonne ones  
in his goyng about, as couchyng south-  
est and nozthwest.

¶ Farthermoze knowe that the natu-  
rall cours of the sonne is to go rounde  
about this circle, mouing properly from  
the nozthwest to the southest & so con-  
trary, and neuer moueth Est noz west,  
noz ful South oz ful nozth of his owne  
natural mouyng, and also he maketh  
but one daye & one nyght in all the hole  
yere and goeth but ones about the erth

A. b.

in

The declaracion of  
in that space, the whiche is diuided into  
iii. C. and thze scoze degrees.

¶ The mocion of the Sonne  
by the tenth Spere.

**A**lso the Sonne hath another mo-  
uynge by the tenth spere, by  
whose violence and goyng about from  
the East to the west he taketh & carrieth  
with hym the Zodiake, and as by se-  
myng he maketh the Zodiake turne bp-  
sido wone and so maketh the sonne go &  
tourne rounde about w<sup>th</sup> hym from E<sup>st</sup>  
to the west in .xxiiii. houres so swyftly  
that in euery houre he goeth .ix. hun-  
drezth myles, corespondyng the earth,  
and by this accounte the sonne goeth a  
myle in the space of synyng .iiii. plaine  
songe notes, as I haue oftymes pro-  
ued by the houre of a clocke, and of these  
xxiiii. houres he maketh a day & a nyght  
describyng dayly certayne imperfecte  
circles about the earth called spire, as a  
man

the Leape yere,

Eol.v.

man shulde wynde a threde aboute a  
rounde ball lyeng one threde besydes  
another, and by this seconde mouynge  
of the tenth spere the diuine prouidens  
hath so ordeyned the Sonne to make  
days and nyghtes through al þe worlde,  
and also describeth the circle of Capricorne  
equinoctiall the circle of Cancer &  
~~meridian Circle~~. And furthermore in  
this circuite of daye and nyghte he  
moueth in his owne propre circle frome  
the west to the East agaynste the tenth  
spere. lxx. minutes. viii. secordes. xvi.  
thirdeg. xiii. fourthes. xii. fyftes. xxxi.  
Textes after Ptolome. 3<sup>o</sup> Almagest. and  
after Alphonse there is but, xix. thirdeg.  
xxxvii. fourthes. xix. fyftes. xiii. sixt. lb.  
seuenches, the which diuersitie of opi  
nions is one cause of variete of the yere.  
And also another variation is because  
that no euen nombze can be had of days  
in the yere without certayn ode houres  
and minutes, secodes, thirde, &c. wherby  
the



**The declaration of**  
the comon yeres semeth to haue mo hou-  
res and minutes one yere than another,  
wherof cometh the leape yeres, Ciclus  
solaris, and all the other cōcurrentes of  
the Sonne, & yet the very true yere is  
alwaye a lyke longe, but that the Astro-  
nomers can make no other diuision, be-  
cause of the vnequalitie of the naturall  
days made by the imperfecte circles of þe  
Sonne called spire, as afterwarde shal  
be declared.

**¶ The mocion of the Sonne**  
by the nynthe Spere.

**T**he thirde mouyng of the Sonne  
is caused by the nynthe spere, the  
whiche is frome the west to the Est in  
ii. C. yers, but one degre & .xxviii. minut,  
and this mouyng is called the mocion  
of the .ii. concentricall ozbes of the sonne  
And by the longe continuance of this  
mouyng frome the begynnynge it hath  
brought now p̄sently the h̄yest point  
of

the Leape yere.

Fol. vi.

of the eccentrickall orbe of the son called  
Aux solis, into the fyrst degre of Cancer  
& xli. minutes, so that therby the compas  
of the sonne is so muche greater and hy  
er aboue the earth, then beneth the earth,  
that the centure of this Orbe and the  
centure of the zodiacke dyffereth a hun  
dretche and thyrty thousande .v. hun  
dretche foure score and one of myles, vt.  
stadies, thre score and .xiii. pases, so  
that oure sommer can not be so hote as  
theyr sommer that dwelleth betwyxe  
the tropyke of Capricorne, and the cir  
cle Antartyke, bycause the sonne in the  
sayd eccentrickall orbe is so farre aboue  
the earth, and so muche hygher in the  
noyth sygnes, then in the south sygnes,  
so that in the mounge of this Aux by  
twyxt Cancer and Lybra, the Nothe  
parte of the woꝛlde shalbe moze fertilityll  
and better inhabytred with encrease of  
people and cattell, then the south partes  
and from Lybra to Capricorne, the con  
trary.

The declaration of  
eterny, and also by this motion, the sonne  
maketh the halfe yere fro spryng tyme  
to autumpe longer by .ix. dayes, then fro  
autumpe to the ende of wynter, his com-  
passe is so greate and hye aboue our Or-  
ryzon, ferdermoze the sayde mocyon of  
the ninth spere, hath presently brought  
the begynnyng of Aries in the Zodiake  
of the tenth spere, from the begynnyng  
of Aries in the Zodiake of the .viii. spere  
into the .xxvi. degrees of Aries, so that  
in this thyrde mouyng of the son, there  
be dyuers causes of variacion bothe of  
dayes and houres, whiche ought to be  
noted for the perfyte deuision of dayes,  
and lengch of the yere hereafter.

**C** The motion of the sonne by  
the eyght spere.

**T**he fourth mouyng of the sonne is  
by the eyght spere, the which rol-  
leth and cumbleth the Zodiake hyther  
and thither as it shulde seme to daunce,  
and



the Leape yere; Fol.viii.

and so maketh the sonne go East, West  
North, and South, describyng two ip-  
tel circles aboute the begynnynge of  
sprynge tyme, and autumpe, and causeth  
them to vary and not kepe theyr places  
in the begynnynge, by the space of .ix.  
degrees, as sometyme the begynnynge  
of Aries shall not be in the equinoctiall  
lyne by one degree, two, or thre, and so  
to .ix. degrees, and then to come agayne  
from .ix. to .viii. and so to the equino-  
ctiall lyne, and the space of this movynge  
is .viii. thousand yeres, and thus in lyke  
maner, ye shall understande of Libra,  
Cancer, and Capricorne. Also knowe  
that about Cancer and Capricorne are  
made no circles, as in Aries, and Libra  
but vnequal thre cornerde fygures, and  
thus by this moeyon the tymes when  
dayes and nyghtes are alke longe, and  
also the tymes when the dayes are lon-  
gest and shortest, doth vary and keapeth  
not alwaie theyr poyntes and dayes, so  
that

The declaration of  
that ye can not say, this day is equinoce-  
cium, and this daye solstitium for euer,  
And this is one cause of variacion of the  
yere, and specially to them that begyn  
the yere at the equinoctiall or tropykes  
of sommer and wynter.

¶ Of the deuision, and length of  
the dayes accordyng to the  
mocions aforesayde.

**K** Nowe y<sup>e</sup> there be .ii. maner  
of dayes, that is to saye. A  
natural day, & an Artifici-  
all day. A naturall daye is  
deuyded into two partes,  
that is to say, eyther meane or dyuers.  
The meane daye is the space that the  
sonne goth once rounde about the earth  
accozdyng to the mocyon of the equi-  
noctiall circle, the which is iust in the  
space of. xiiii. houres. The dyuers or  
vnequall daye is the same mocyon of  
the equinoctial, puttynge to the mouing  
of

of that part of the Zodiake, in the whiche the son moueth agaynste the tenth spere in .xxiii. houres of the zodiake, the whiche is alway diuerse, because of the vnlyke ascencion of the Zodyake and excentricite of the sonne, so that sometime in the yere it is longer than the meane or equall daye by .xxii minutes, and so varieth and discreaseth to nothyng, accordyng to the place of the sonne in the Zodyake and in his eccentrical Orbes so that frome the ende of Aquary to the begynnyng of Scorpio, that is from the tenth daye of February to the .xiii. day of October it increaseth to .xxii. minutes. And from the begynnyng of Scorpio to the ende of Aquary it discreaseth from .xxii. to nothyng, and than the days are equall. And thus ye must consyder that the day is not perfozmed of partys and equall houres, so that betwixe the sonne rysyng this day, and the sonne rysynge to morowe is nat Just .xxiii. houres,



The declaracio of  
but is euer longer frome one minute to  
xxii. and so thyster backwarde agayne  
from. xxii. minutes to nothyng, sayng  
alonly in the begynnyng of Februarye.  
Also knowe that there be. iij. causes that  
prouerch this vnequalitie of dayes. The  
firste is the vnequall ascencion of cer-  
tayne partes of the Zodiake to the Equi-  
noctiall, bothe in a strepgh and croked  
spere, in a strepgh spere, the alonly cau-  
se is the obliquitie of the Zodiake. The  
seconde cause is in a croked spere, both  
the obliquite of the zodiake & of þ circle  
Orizon. The thirde cause is the mouing  
of the sonne in hys eccentricall Orbe, by  
the which the Sonne goeth sometyne  
lesse, and sometyne moze in the Zodiake  
the which difference is betwixte. iij. &  
iiii. minutes, and this is the chiefe occa-  
sion of varietie of the dayes, after the  
mouynges of the heauens, wherby ye  
may perceiue whan the dayes are not of  
euen houres, but haue certayne odd mi-  
nutes

hutes, so in lyke maner the Leape yere must nedes alter and differe therco accordyngly.

**¶** The diuersities of the begynnynge of dayes accordyng to the inhabitations vpon the earth,

**K** Nowe that the begynnynge of dayes ben dyuers, accordyng to the vse of dyuers and sundry countreys. The Hebrewes and the Athenienses begynneth the day at the sonne settinge so that frome the sonne settinge to the sonne settinge agayne, they accompte for one day bicause it is said in Genesis. *Factum est vespere et mane dies.* &c. The Grekes and Babilonians beginneth theyr day at the sonne rysynge, and so to the sonne rysynge agayne to be one daye.

The Vmbrians and all Astronomers begyn theyr day at noone, and so from

B.ii.

noone.

**The declaracion of  
noone to noone, one day.**

**T**he Romayns and the west part of the  
worlde, begynneth theyr daye at myd-  
nyght, rekenynge from mydnyghte to  
midnyght to be one day, and this begin-  
nyng is now obserued in the churche  
of Englande, so that this alteracyon of  
the begynnynge of dayes, makes the  
Hebrewes begyn theyr sonday vppon  
Saturday at nyght to the Grekes. And  
the Romayns begyn theyr sonday vpon  
Saturday at mydnyght. And the Grekes  
begyn theyr sonday vppon sonday at  
noone. The Astronomers begyn theyr  
sonday vpon sonday at none, and endeth  
vpon monday at none, so that Saturday  
is a parte of sonday, and sonday is a parte  
of monday, wherfore the Leape yere can  
not kepe al one day, in al places at once;  
but varpeth, and dyffereth, accordynge  
to the diuersities of dwelling is in sun-  
dry countreys, as appereth abouesayd.

**The**



**T**he variacion in length of the dayes  
 accordyng to the inhabitacions vpon the  
 earth, after the opinion of Ptholome,  
 and Alexander and other newe Wri-  
 ters as Iohn De Roias declareth,

**T**he Vles Taproban in the South  
 Indy the see, hath the longest day  
 in the yere of .xii. houres longe.

At the Cytie Saba in Ethiope, where  
 sometyme saint Mathewe preached the  
 Gospell, the longest daye in the yere is  
 xiii. houres longe.

At Ierusalem and Alexandrie the chiefe-  
 st Citie of Egipte hath the longest day in  
 the yere of .xiiii. houres longe.

At Rome the chiefe-  
 st Cytie of Italie  
 hath the longest day in the yere of .xv.  
 houres longe.

At Cesar Augusta, in Aragon, .xv. houres  
 a quarter and an halfe.

At Parise in Fraunce .xvi. houres long.

At Cales, the longest day is .xvi. houres

B.iii.

and

The declaration of  
And halfe a quarter.

At Caunterbury. xvi. houres and a quarter.

At London. xvi. houres and a halfe

At Cambridge. xvi. houres and. ii. quarters and a halfe.

At Stanfozde. xvi. houres and. iii. quarters.

At Newewarke. xvi. houres and the quarters and a halfe.

At Pozke. xvii. houres longe.

At Northalerton. xvii. houres longe and halfe a quarter.

At Newecastell. xvii. houres longe and an halfe.

At Berwyke. xvii. houres and a halfe, and halfe a quarter longe.

At Edenburghe in Scotlande. xviii. houres longe.

At the myddell of Scotlande. xviii. houres and a quarter longe.

At the farthest northe parte of Scotlande. xviii. houres and a halfe longe.

At Orchades ples. xviii. houres and. iii. quarters

quarters longe.

At Thyle ples beyonde Scotlande .xix. houres longe.

At Islande beyonde Thile. xix. houres and an halfe longe.

At Gronlande oz Gruntlande some what farder then Islande. xix. houres and thze quarters longe.

At the myddel of Gronland. xxii. houres longe.

At the begynnynge of the Wilappiens lande. xxiii. houres longe.

At the myddel of the Wilappiens lande xxx. houres longe.

At the begynnynge of the byllapians countrey, where the sea is frofyn moze then a. C. myles, the daye is. xxxiiii. houres longe.

At the myddel of the Uyllapiens countrey. it is. xxxvi. houres longe, and thus reken thzough all the Scythians countrey, and the farder nozthe, the longer dayes, tyl ye come to the frofyn sea, and

B.iiii.

pole



The declaracion of  
pole Artyke, where the one halfe of the  
yere is contynually daye, and the other  
halfe contynually nyght, wherefoze ye  
may well consydre that the yere hath  
not alway one length and one nombze  
of dayes to all men dwellynge vpon the  
earth, for some men hath one hundzeth  
houres in one day, some two. C. some. iiii  
C. some a thousande, some two thou-  
sande. and some thze thousande, some  
iiii. thousande. v. hundzethe, and .xx.  
houres, the whiche is in the haife yere  
but one day artificial.

**T**he deuision and length of the houre  
accordynge to the mouynges of  
the heauens.

**T**he houre is deuided two maner of  
wayes, that is to saye, an houre  
equal, and an houre vnequall.  
The equall houre conceyneth . xv. de-  
grees of the Equinoctiall, so that once  
goynge

Goynge about the earth of the Equinoctial, is iuste. xciii. houres.

The vnequall houre, is also called a natural houre, the which conceyneth. xv. degrees of the Zodiake, and because the partes of the zodiake are of vnequal rpyng, the houres thereof be also vnequall, the which houres be commonlye called the houres of the planettes, of the which there be. xii. euerye daye, and. xii. euery nyght, whether the day or nyght be longe or shorte, yet Orontius and Aspian holde the opinion that the houres of planets are not equall, but receyue a certayne difference of vnequalitie at the fyrst houre of the day, contrary and agaynste the opinion of al olde and auncient wyters.

**T**he diuersities of the beginninges of houres after the inhabitations vpon the earth.

**K**nowe that all the clockes at Jerusalem

The declaracion of  
Ierusalem, Babylon, Italy, and Beame,  
begyn theyr fyrste houre at the son ry-  
syng, the which is sometyme oure. iiii.  
v. vi. vii. and .viii. of the clocke before  
none here in Englande, accor dyng to  
the tyme of the yere, and in Marche the  
fyrste houre, is our .vi. of the clocke at  
mozne, at the which tyme Christ was  
led before Pilate. Our .ix. of the clocke  
is theyr thyrde houre, when Christ was  
crowned with thorne. Our noone is  
theyr syxte houre, when Christ was  
nayed to the Crosse. And our .iii. of the  
clocke at after noone, was theyr nynt  
houre whē Christ dyed vpon the crosse.  
The Athenienses begyn theyr first hour  
at the sonne setting, the which is some  
tyme oure .iiii. v. vi. vii. viii. of the  
clocke at after noone here in Englande.  
The clockes of Noriberge in Germany  
begynne the fyrst houre at the sonne  
rysyng, deuydyng the Artificial daies  
and nyghtes in euen. xii. partes lyke the  
houres



the Leape yere,  
houres of planettes.

Fol, xiii.

**The** variacion of houres for one time  
of the day, accordyng to the inha-  
bitacions vpon the earth, and  
specially from the myddes  
of the daye, or noone  
at London.

**K** Now that when it is none at Lon-  
don. it is paste none at Yorke the  
eyght parte of an houre.

At Cesar Augusta in Aragon and at Pam-  
pilona, in Hauerne, it is even none with  
London.

At Dortpynge it lackethe moze then  
halfe an houre of noone.

At Colaine, it is halfe houre past none.

At Caunterbury it is the nyth part of  
an houre paste none.

At Dreforde it lacketh almost the. viii.  
parte of an houre.

**A**t Edenburghe in Scotlande

it

**The declaracion of**

**It is the thyrde parte of an houre paste noone.**

**At Barse it is almost the thyrde parte of an houre paste noone.**

**At Louaine, Brussel, Antwerpe, Machlyne, and Compelere, it is almoste halfe houre paste none.**

**At Erphorde Neoburge, cities in Turpungia in Germanye, it is one of the clocke at after noone when it is mydday at London.**

**At Venyse it is somewhat paste one after noone.**

**At Roome it is an houre and a halfe paste noone.**

**At Macedony and Epiro in Grece, and at Cirenace a Province in Aphricke it is .ii. houres paste noone.**

**At Anthioche in Asia where sometyme the lytell men called Pigmei dwelled, in the countrey of Phrisia, it is thye of the clocke at after none.**

**At Mesopotamia in Asia, & in the partes  
of**

the Leape yere.

Fol. xliii.

of Babilon and Araby, it is foure of the  
clocke at after none.

At Ierusalem it is, iiii. houres and a  
halfe past none, so that whan Chryste  
suffred deach at the nyche houre, it  
was. vii. of the clocke at after none at  
London, & in the tyme of Equinoctium.

At Medea in certeine cities & in Perses  
des it is. v. after none, & in the conctrey of  
Margian in Asia where groweth mer-  
ueylous great vines it is. vi. after none.  
At the cities in Sedzolle & Ynde wich  
in the floude Ganges & at Calicut,  
from whence the kyng of Porcyn gall  
bryngeth all our spyes it is. vii. after  
none.

At the cities of the regions of Sace &  
Mallagete in Ynde and at Ciromandel,  
where saint Thomas was buried it is  
viii. after none

At Bangella a citie in Ynde without  
the floude Ganges, and at a citie called  
Gambaleschia, þ chiefe citie in Scichia  
in



The declaracion of  
in the lande of Cathay belongyng to the  
great Chaan in Ynde, and at Eldama,  
where saint Thomas preached, it is .ix.  
after none.

At Sinda & Gorgata cities to the contrary  
of Auree cerlonesi it is .x. after none.

At Thagora a citie in the same contrary  
it is .xi. after none.


At Sinna and Laoch cities in the kyng-  
dome of Morsuli, the which be Ethiopes  
and eardes of Iannes flethe, it is .xii.  
at mydnyght.

¶ Also make, that whan it is none at  
any of these places aforesayd, and chan-  
ge as ag: that .ij. houres before none at  
London as these places are after none.  
Example: when it is none at London,  
it is somewhat past one of the clocke at  
Uentse. And whan it is none at Uentse  
it is .xi. of the cloke before none at Lon-  
don, and so for .ii. after none is .x. before  
none; for .iii. after none is .viii. before  
none, for .iiii. after none is .vii. before  
none

the Leape yere,

Fol. xv.

none, & for mydnyght, it is none & so  
fourche. And whā the sonne setteth vpon  
Saterday at nyght at London, it ryseth  
vpon Sunday at moone at Loache. & c.  
in the kyngdome of Morfuti in Ethio-  
pe, and whan it is none there it is myd-  
nyght at London, & whā the sonne setteth  
to them it ryseth at London, so that  
almost they set their feet agaynst ours  
here in England, and thus ye maye per-  
ceyue great diuersite amongst the dwel-  
lers of the world, for the accountyng of  
the houres in all places at ones.

 Of the deuision and length of the  
yere, after the cours of the heuens.

**T**he yere is deuyled two maner of  
wayes. The fyrst is a comon yere,  
the whiche is thre yeres togither. The  
seconde is a Leape yere, the whiche is  
the fourth yere nexte after the thre com-  
mon yeres.

And

**The declaration of**

**And nowe as thouchynge the length of  
the fyrste common yere. Knowe that  
there hath benne dyuers oppynions, and  
of longe tyme, both of the Hebrewes be-  
fore Moes floud, & also of the Thebains  
Greekes, and Latins, sence Moes floud,  
and specially Iulius Cesar folowynge the  
opinion of the old Astronomer Soligenes  
hath ordeined and constitute to the thre  
common yeres, to conteyne in length.iii.  
hundreth thre scoze and. v. dayes, and  
the fourth yere to be Leape yere, hauing  
thre hundreth thre scoze and. vi. daies.  
Also Ptholome supposeth the fyrst com-  
mon yere to haue thre hundreth thre  
scoze. v. dayes. v. houres. lv. mynutes,  
and .xii. secondes.**

**Albategnius differeth from that, putting  
to but. xl v. mynutes, and. xxxvi. secondes  
Also Thebit differeth from them both,  
and putteth to. vi. odde houres. ix. my-  
nutes and. xii. secondes, and of this opi-  
nion is Campanus with other.**

**The**



The Astronomer Azrael agreeth with Ptolome in odde houres, and disagreeth with chemal, in mynutes and secondes. **¶** Buttynge to. v. odde houres . xlix. mynutes .xb. secondes. lvi. thyrdes. li. fourthes, and. xii. fyftes. And because of the dyuersities of these opinyons upon a perfyt tryall made of the nereste and best opynyon in the crowe and perfyte length of the fyrste common yere. Know that it is supposed to be. llii. C. lii. scoze and. v. dayes, v. houres. xlviii. mynutes xli. secondes. xlv. thyrdes. xxxviii. fourthes xliii. fyftes. x. sixts so that the Leape yere lacketh of a hole day of. xliii. hours. xlv mynutes. xiii. secondes. ix. thyrdes, and xlv. fourthes. wherfore by these oddes in houres, mynutes, secondes, thyrdes, &c. There is greate alteration in many yeres, so that in a. C. and. xlvii. yeres, it dyffereth one daye, and in a thousande liii. C. and. liii. yeres, it altereth. xi. days and. xxxii. mynutes, For Ptolome in his

The declaracion of  
cyme dyd obserue the entrance of the  
sonne into Aries to be the. xxi. of March,  
and it is now commonly aboute the. x.  
day of March, so that in space of time,  
yf the yere be not corrected, the longest  
day in the yere may come to Christmas  
day, if God suffer the worlde so longe.

**T**he diuersities of the beginnynges  
of yeres, accordyng to the dwell  
ers vpon the earth,

**A**lso know that the Alexandringes  
and the Egiptians begin theyr yere  
at the. xxix. daye of August, and ordey  
ned euery moneth to haue. xxx. dayes,  
and the last moneth to haue. xxxi. dayes.  
Iulius Cesar wylth al the Latins and Ro  
mains ordeyned the yere of. xii. monethes  
and begyn the yere at January, putting  
xxxi. dayes, in January, March, May,  
Iuly, August, October, December.  
And in Apryll, Iune, September, No  
uember

the Leape yere,

Fol. xvii

ueber .xxx. dayes, & Febzuary in Iulius  
Cesars tyme in common yeres .xxix. daies  
and in Leape yeres .xxx. dayes. And af-  
terward by the senate in the honoure of  
August the eyght Cesar, one day of Fe-  
bzuary was taken away, and put to the  
moneth of August, and so made of .xxviii.  
dayes, as it is now in olde Kalenders:  
Furdermoze Romulus ordeined the yere  
to be of .x. monethes, and to conceyne  
iii. C. and .iiii. dayes, begynnyng the  
yere at Marche.

Pomplius the seconde kynge of the Ro-  
mayns, ordeyned the yere of .iii. C. and  
iiii. dayes, with sundry dyuersities of  
dayes in the nombze of monethes, and  
Febzuary to haue .xxix. dayes.

Also the Assiriens, Arabians and Caldes,  
ordeyned the yere to conteyne but foure  
moneth, as Zenophon declarethe. So  
that ye may perceiue another cause of al-  
teracio of the leape yere by the sodry be-  
gynnings of yeres, and in dyuerse and

C.ii.

sondry



The declaracion of  
sounde places of the worldes.

20 The diuersities of the tymes and mo-  
nethes of the yere, after the inhabi-  
tacions vpon the earth.

**K**nowe that the people dwel-  
lynge in the countre of Bra-  
silia, beyng in that parte of  
the worlde called America,  
with all the portes and ha-  
uens called Canibales, where be founde  
many precious stones, and also the regi-  
on of Stauntes, where Magellanus that  
passed the strayght and narrow see, be-  
yonde America, dyd measure them to be  
ten fere longe, and also the yle Spagnola,  
where groweth Lignum guaiacum, &  
also the yle Madagascar perreynynge to  
the yles of Taproban in the southe In-  
dythe see, belongyng to the great Cham  
where groweth Peper, sylke, and Pre-  
cious stones, haue wynter when we  
haue

the Leape yere. • Fol. xviii.

haue sommer, so that oure Autumpe is  
theyr spzyng tyme, our wynter, theyr  
sommer, also our Marche is theyr Sep-  
tember, our Apryll, theyr October, our  
May, theyr Nouember, our Iune, their  
December, and so forth.

Also the men dwellynge in the ples of  
Taproban and Laua minor, the whiche  
eatech mans fleshe, so that when they  
be sycke, they kyll them that they may  
be the better to eate, and in the ples Mo-  
lucses, where groweth mace, cloues, si-  
namond, nutmugs, gynger, and also at  
Calicute and ocher illes within the floud  
Ganges in Inde, where be men without  
mouthes, lyuynge alonely by smell, hath  
sommer when we haue spzyng tyme,  
and our March, Aprill and May, is their  
Iune, Iuly, and August. Also they haue  
two sommers and two wynters in one  
yere, so that the diuersities of dwellyn-  
ges altereth the tynes, & setteth one mo-  
neth for an other, & winter for somer, &  
al at one tyme.

The

### The declaracion of

✠ The Bysextilles or Leape yeres from  
the Natiuite of Christe to the yeres of  
Christ, xviii. thousande, iii. huudreth, iiii.  
score and, xii. With all the ode minutes,  
secondes, thirdes, fourthes, fyftes and  
sextes, lackynge of a hole Leape yeres  
daye, Wherby Christmas daye and all the  
monethes of the yere are remo-  
ued from the tymes and pro-  
pre places of the yere that  
they be nowe in,

**I**n the yere of Chzistes nati-  
uite, the Sonne entred in to  
Aries the. xxi. daye of Marche  
at. ii. of the cloke. lvi. minutes  
xxix. secondes, xxi. thirdes. xxx. fourthes  
xxvii. fyftes. xi. sixtes at after none.

✠ The. liii. yere after beyng Leape  
yere dyd lacke of a hole day. xlv. minutes.  
xiii. secondes. ix. thirdes. xliii. fourthes.  
xxx fyftes and. xx. sixtes.

✠ The. xvi. yere beyng Leape yere dyd  
lacke



the Leape yere: Fol. xix;

lacke of a hole day. ii. houres. lii. secon-  
des. xxxviii. chirdes. lvi. fourthes, one  
fyfte. xx. sixtes.

¶ The. iiii. scoze and fourth yere beyng  
also Leape yere lacketh of a hole daye  
xii. houres. iiii. minutes. xxx. secondes  
xx. v. chirdes. lii. fourthes. v. fyftes, and  
xx. sixtes.

¶ The hundzethe x. xxviii. yere beyng  
Leape yere, lacketh a hole daye. vii. mi-  
nutes. xi. chirdes. xliiii. fourthes. x.  
fyftes. xi. sixtes, the whiche causeth the  
tyme of the yere in the Equinoctiall and  
Tropikes to be a day befoze the accusto-  
med tyme.

¶ The. ii. hundzeth. lvi. yere beyng  
Leape yere lacketh. ii. dayes. xliiii. mi-  
nutes. ii. secondes. xxiii. chirdes. xxviii.  
fourthes. xx. fyftes and. xxi. sixtes, the  
whiche remoueth the tyme. ii. dayes be-  
foze the accustomed tyme.

¶ The. v. hundzeth and. xii. yere being  
Leape yere lacketh. iiii. dayes. xx. hours

C. iiii.

xxviii

the Leape yere.

xxviii. minutes. iiii. secōdes. xlii. thirdeſ  
lvi. fourthes .xlii. fyftes by the which  
the dayes of the Leape yeres and tymes  
of the yere doth come. iiii. dayes befoze  
the accustomed tyme.

**C** The thousande and. xx. yere it vary-  
eth. viii. dales. x. minutes. lvi. secondes  
xxiii. thyrdes. viii. fourthes. lv. fyftes.

**C** In the yere a thousande a hundzeth  
xlviii. it altereth. ix. dayes. xlv. minutes  
lix. secondes. xxxv. thyrdes. liii. fourthes  
v. fyftes xl. syxtes.

**C** In the yere a thousande. iiii. hundzeth  
and .iiii. it goethe .x. dayes befoze the  
tyme accustomed. xxxii. mynutes. ii. se-  
condes. ix. thyrdes. xxi. fourthes. xxvii.  
fyftes.

**C** In the yere a thousande. v. C. xxxii.  
it moueth. xii. dayes. xxxix. mynutes. iiii.  
secondes xxi. thyrdes. v. fourthes. xxxvii.  
fyftes. xl. syxtes befoze the time accusto-  
med.

**C** In the yere a thousande. v. C. xlviii.  
it

It altereth. xii. dayes. iiii. houres. xxxix. minutes. lvi. secondes. iiii. fourthes, xlvi. fyftes.

✚ In the yere thousande. v. C. llii. it altereth. xii. dayes. iiii. houres. xxv. minutes. ix. secondes. ix. thirdest. xlvi. fourthes. xlviii. fyftes. x. xx. sixtes, as dothe apere aboue sayde, declarynge the difference of the entrance of the Sonne into Aries bothe in Ptholomes tyme and in this our present tyme.

☞ The yere a thousande. vi. C. and. xlii. it moueth. xii. dayes. xv. houres. xlii. minutes. xxvi. secondes. xxxv. thirdest. lv. fourthes. xlii. fyftes. xx. sixtes.

☞ In the yere a thousande. vi. C. iiii. scoze. x. xii. it moueth. xlii. days. x. houres. ii. minutes. iiii. secondes. ii. thirdest. iiii. fourthes. xxviii. fyftes and. xx. sixtes.

☞ In the yere. M. vii. C. xxxii. it altereth. xlii. days. xxi. houres. xx. minutes. xxi. secondes. xxviii. thirdest. xi. fourthes. ii. fyftes, and. xx. sixtes.



The declaracion of

**I**n the yere. M. vii. C. llii. scoze & xlii.  
it chaūgeth. xliii. days, viii. hour. xxxviii  
minutes. lvi. secondes. liii. thirdeg.  
xviii. fourches. xxxviii. fyftes. xx. sixtes.

**I**n the yere. ii. thousande. C. and. liii.  
yeres the tyme is remoued. xliii. days.  
viii. houres. l. minutes. xviii. secōdes. xix.  
thirdeg. xxxvi. fourches. xxxvi. fyftes. &  
xl. sixtes, the entrance of the sonne into  
Aries this yere, shalbe the. xxvii. daye of  
February. The longest daye of the yere  
shalbe the fyrst daye of Iune, & the shor-  
test daye shalbe þe first day of December.

**I**n the yere. iii. thousande. 4. C. lii.  
scoze and. liii. it chaungeth. l. days, xvii.  
houres. liii. minutes. iiii. secondes. ii.  
thirdeg. liii. fourches. xciiii. fyftes. xl.  
sixtes, and this yere shal the Sonne  
entre into Aries the seconde day of Fe-  
bruary. The longest day shalbe the. v.  
daye of Maye, and the shorrest, the. liii.  
day of Nouember.

**I**n the yere. v. ii. thousand. lii. C. & lii.  
scoze

Score the tyme shalbe remoued. iiii. score  
 & .ix. daies. xvi. houres. xxii. minutes. lvi.  
 secondes. xvi. .thyrdes. xxxvi. fourthes.  
 xlix. fyftes, and. xl. sixtes. This yere the  
 sonne shall enter into Aries vpon Chyrist  
 mas day, and the xxvii. of Marche shal  
 be the longest daye in the yere, and the  
 xxvi. of September the shortest daye.

¶ In the yere of. xviii. thousande. iiii.  
 C. iiii. score and. xii. shall the longest day  
 in the yere come to the shortest, & De-  
 cember shall fall in the Sommer, and  
 June in the wynter.

¶ To knowe the day of the Leape yere  
 in the Kalender, and why it is so na-  
 med, and also saynt Mathewes  
 day for euer.



¶ We in beholding and con-  
 sideringe the manyfolde op-  
 pynions and dyuersities that  
 hath ben in al Europe, for the  
 true knowledge and lengthe  
 of

The declaration of  
of the Common yeres, and also Leape  
yeres, and the deuision that hath comen  
thereby in olde tyme, and howe Iulius  
Cesar perceyvinge the odde houres, mi-  
nutes, secondes, and thyrdes, not to be  
very sensible, but in many yeres to come,  
and in auoydynge all deuyfions and ru-  
mours amongst the people, did ordeine  
generally by the helpe of Sosigenes, the  
fourth yere to be leape yere, not regar-  
dyng any odde houres or mynutes, but  
continually keepynge that order. So  
that accor dyng to his institucion, I  
shal also forsake the odde mynutes, and  
folowe his trade, vnto the tyme that it  
shal please god & the kynges maiesty to  
make a refozmacion therin, wherefoze  
knowe that the leape yere is so named,  
because it leapech fro tuesday to thurs-  
day, or from the .xxiii. day of February,  
to the .xxv. and so maketh .xxix. dayes  
in Februarye, where the thre common  
yeres befoze, hath but .xxviii. dayes, as  
appeareth



the Leape yere. Fol. xxi.  
appeareth in every common kalender.  
Also the day appoynted of Iulius Cesar,  
as Stofflere declareth, is the .vi. kalende  
of Marche, the which is the .xxiii. day  
of February, vpon the letter F. and this  
day and letter muste berekened for two  
dayes, and for that cause it is cal-  
led in Latin Annus bisextilis. Also saint  
Mathias day is alwaye vppon the let-  
ter F. the which is the .xxv. day in reke-  
nyng, and standeth vpon the .xxiii. day  
in all common kalenders, and in many al-  
manackes, it is set forth at length.

Go lytell treatyse : deuoyde of all eloquence,  
With phrase of Language after thy countree  
Full of rude termes, and barayne of al science  
And for thy true meaning, require every degre  
To pardon thy defaultes, lest thine nauitie  
Of Saturne with mercury: had any inspection  
Submyt thy selfe : to al mens correction.

**FINIS.**

# **IOANNES ELTOFTES**

magistri Elissi Skiptoniensis per  
dagogi discipulus.



**Q**uam diu solo hæc regio latino  
Vsa sermone est, referendo libros,  
Artium pauci tetigisse metam,

Gesta loquuntur,

Nunc virum quiuis adeat corinthum,  
Vel rudis (verbum modo possit vnum)  
Artibus linguam poliat disertis

Ingenumq;

Huc iter lector teneas in isto  
Multa peruoluens patria loquela  
Aschami libro reperire possis,

digna notatu,



PERLEGE NÖMEN

marginē vatis,

Q



ST

EL.

**A**Ntea quæ poteras lingua didicisse latina,  
Nunc patrio discas facili sermone, Britanne,  
T. estetur codex, quem protulit Aschamus, iste,  
Oculus ingenij, doctrina pondere pollens,  
Nuda iacent ueterum mendacum dogmata, prorsum  
Incelebris sua fama perit, fraus exulat, ergo  
Vera manet uirtus, tum ueri culmina, elaret  
Sola sua nitidis gens artibus Angla, loquela  
Amplexis, quis in hoc merito non possit ouare,  
Saltem qui patria letatur felicitate,  
Cetera multimodis, ipsam celebrare student  
Humanis studiis sua premia culque super sint,  
Auctor et istius quos edidit ecce labores  
Magna docens parua serie congesta libelli,  
Vnde breui perplura scias spacio rudis, ergo  
Sume librum, paruo are uenit, dein suscipe lectum.

IOANNES ELTOFTES





**20** The contentes and table  
of this boke,

**I**n this boke is conteined the mouing  
of the sonne in his owne proper circle  
fro the north west, to the south east, where  
he maketh but one daye and one nyghte  
in the yere,

The tenth spere moueth the sonne frome  
the Este, to the Weste, and causeth the  
sonne to make dayes and nightes, and  
in numbze and lengthe, accoꝝdinge to  
the dyuersities of dwellynge vppon  
the earth, and also somner and wynter  
at dyuerse tymes, in dyuerse places, and  
countres, deuydynge the tyme in mo-  
nethes, and the monethes in wekes, the  
wekes in dayes, the dayes in houres, the  
whiche are not equall, but by puttynge  
to. certayne mynutes, secondes and thir-  
des. &c. wherof commeth the odde yere in  
foure yeres.

The nynt heauen moueth the son from  
his place in. ii. C. yeres, one degree, the  
whiche

### **The table.**

Whiche in contynuaunce of longe tyme,  
remoueth the leape yere, and sets euery  
moneth in others places, and that for  
lacke of this knowledg or els notregar-  
dynge the same, bycause of the longe  
tyme, it hath made al the diuision befoze  
tyme, and yet they haue passed ouer  
this mounyng, folowynge alonely the  
course of the tenth spere, to this present  
daye for the Leape yere.

The eyght spere moueth the sonne both  
Este, Weste, North, and South, the  
quantitie of .ix. degrees, in the space of  
seuen thousande yeres, so that by these  
iiii. mounynges, the sonne seruech al the  
worlde at sundrye and dyuers tymes.  
Furthermoze know that god hath made  
the earth our dwellynge place, of suche  
shape and fashyon, that euery man in  
the worlde is serued with the sonne all  
at one tyme, so that it is now presently  
this day, sommer, winter, day, nyght, son  
ryse, sonne sette, noone, one of the clocke

**The table.**

**Two of the clocke, and all tymes that ye  
can speke of in some parte of the world:  
Whitby abbey, and Hylda the abbesse  
Wylfrýde abbot of Rippon.** folio.ii.

**The Zodiake.** folio.iii.

**Of the Zodiakes.** fol. eodem.

**The bredth of the Zodiake, xvi. degrees.**  
folio. eodem.

**The latitude of Venus. viii. degrees. co.**

**The Zodiake ful of Images.** eodem.

**The fashion of the Zodiake.** eodem.

**The Zodiake a croked circle.** eodem.

**The way of the sonne.** folio. iiii.

**The lyne ecliptike.** folio. eodem.

**The situacion of the Zodiake** eodē.

**The course of the sonne.** eodem.

**The sonne goeth from the Northweste  
to the S. rucheſt.** folio. eodem.

**The moupnge of the sonne by the tenth  
spere.** folio. eodem.

**The sonne goeth from the Eaſte to the  
Weſte.** folio. eodem.

**The sonne moue h aboute. ix. C. myles  
in**



**The table.**

in an houre	eodem.
The sonne goeth a myle in synging. liit.	
playnesonge notes.	eodem.
The circles spire.	folio. eodem.
The circles of Capricorne equinoctiall	
Cancer, and Meridian.	folio. b.
The space that the sonne goeth in his	
owne circle.	folio. eodem.
The oppynions of Ptholome and Al-	
phons.	folio. eodem.
One cause of the varyaunce of the yere.	
folio. eodem.	
The yere hath odde dayes, houres, and	
mynutes.	eodem.
The cause of the Leape yere, and ciclus	
solatis.	folio. eodem.
The true yere is alway a lyke long.	eo.
The mouynge of the sonne by the ninth	
sphere.	eodem.
The two concentrycall Orbes of the	
sonne.	folio eodem.
The eccentrycal orbe of the son.	fol. vi.
Of Lux solis,	eodem.

**The table.**

**The dyfference of the Centure of the ec-**  
**centrycall Dybe of the sonne , from the**  
**centure of the Zodiake.** eodem.

**Howe the sonne is hyper in one sommer**  
**then in an other.** eodem.

**The increase and discrese of inhabytas-**  
**cions.** folio. eodem.

**The one halfe yere longer then the other**  
**by .ix. dayes.** folio eodem.

**The dyfference betwyxte the Zodyake**  
**of the nyne and eyght spere ,** eodem.

**The mouynge of the sonne by the eyght**  
**spere.** folio. eodem.

**The solsticia, and equinoctia, variethe**  
**from theyr places by .ix. degrees. fo. vii.**

**About Aries and Libra are circles. eo.**

**Aboute Cancer & Capricorne are thre**  
**cornerde fygures.** eodem.

**A greate cause of variacion of the yere.**  
folio. eodem.

**A naturall daye.** eodem.

**In Arctypycvall day.** eodem.

**A meane daye.** folio. eodem.

**A dyuerse**

## The table.

A dyuerse day folio.eodem.

The diuerse day increaseth and discreaseth to. xxxii. mynutes folto. viii.

When the dayes are equall. eodem.

From sonne ryse to sonne ryse is not iust xxiiii. houres, eodem.

Thze causes that proueth the bnequalltye of dayes. eodem.

The alteracton in the sonne in his eccen trical Orbe, altereth his mouyng in the Zodiake by. iii. oz. iiii. mynutes. eodem.

A great occasion of varietie of the daies folto. eodem.

When the day beginnethe at Athens, Babylon, Rome, Englande, and after Astronomers. folio. ix.

Sacerday a parte of Sondag, and Sondag a parte of Monday. eodem.

The longest dayes in Inde, in Ethiope in Egypte, at Rome, in Spayne, at Parise, at Cales, at Caunterbury, at London, at Stanforde, at Newarke, Yorke Northalerton, Newecastell, Berwyke, Edinburgh



**The table.**

**Edenburgh, Orchades, and Thyle Il  
lande, Gronlande, at the Wyllapiens, at  
the Wyllapiens, at the froshyn sea, and  
Pole artpae** folio. x.

**The yere but one Natural day.** fol. xi.

**An houre equall and vnequal.** eodem.

**An houre Naturall.** folio. xii.

**The houre of planettes.** eodem.

**The opinion of Pzoncius and Apian.**  
folio eodem.

**The begynnynge of houres after the  
clocke at Jerusalem, Babylon, Italy,  
Boeme Roisberge, Acheniens, and Eng  
lande.** folio. eodem.

**The tymes that Chyste suffered passio  
on.** folio. eodem.

**When it is noone at London, where it  
is one of the clocke, two of the clocke at  
after noone.** folio. xiii.

**And wher it is. iiii. v. vi. vii. viii. ix. x. xi.  
and mydnyght, and what tyme it is at  
London when it is none at al the places  
aforesayde.** folio. xiiii.

thre

The table.

The common yere, and one leape yere.

folio. xv.

Dyuerse oppnyons of the length of the

common yere.

folio. eodem.

The order of Iulius Cesar.

eodem.

Soligines.

eodem.

Ptholome, Albategnius, Thebich, Cā,  
panus

folio. eodem.

Azrael.

folio. xvi.

The true length of the yere.

eodem.

The Leape yere lacketh of a hole daye.

folio. eodem.

A hundzeth and .xxvii. yeres dyffereth

one day.

eodem.

A thousand. lxxi. hundzeth and. lxxi. yeres

altereth .xi. dayes.

folio. eodem.

The entraunce of the sonne into Aries,

in Ptholomes: yme.

folio. eodem.

When the Alexandrynges, Egyptians,

Cesar, the Lacyns and Romayns, begin

theyr yere.

folio. eodem.

How Romulus, Pompilius, the Mi-

ciens, Arabians and Caldes, did ordeine

theyr

**The table:**

they? pere.

folto. xbiij.

Zenophon.

folio. eodem.

Where is wynter when we haue som-  
mer.

folto. xbiij.

Where they eate mans fleshe. eodem.

Where men lyueth alonely by smel. eo.

Where the son entred into Aries at Chri-  
stes natiuitie.

folio. eodem.

Howe the Leape yeres are remoued in  
continuaunce of tyme.

fol. xix. & xx.

When the sonne shall entre into Aries,  
the. xxviij. day of February, the. ii. day of  
February & vpon Christmas day. fol. xx.

When the longest day in the yere shalbe  
The fyrst of Iune, the fift of May, the  
xxviij. of March, the fyrst of December,  
& the opposites, the shortest daies. xx. xxi.

How we must take the Leape yere, and  
saynt Mathias daye, and why it is so  
called, both in Englyshe & Latin. fo. xxi.

Lege paucos pro pauci. Folio. xxii.

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To Lectorum

The Duties and his labour both  
do not to be refused.  
Neither the labour he hath spent  
is not to be abused & -  
within this book here is contained  
such salutes for every sore  
As being rightly ministered  
The patient needes not more.

Deo volente -

Let not your hearts get  
lost your hearts on  
vanity nor goods  
nor trust your hearts  
be troubled & dying  
to serve you wisdom and  
with all thy getting yet  
in vain & in vain

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